

HEAT TRANSFER OF A REMOTE HEAT SOURCE USING A LOOP HEAT PIPE

ABSTRACT

Heat transfer systems and methods 30 for use on a spacecraft that use a loop heat pipe to transfer heat from a remotely located heat source to a thermal radiator or other heat dissipating apparatus. The loop heat pipe is a two phase heat transfer device that has an evaporator coupled to the heat source and a condenser coupled to the thermal radiator or other heat dissipating apparatus. The loop heat pipe comprises thin walled tubing to connect the evaporator and condenser. The thin walled tubing allows the loop heat pipe to be flexible. This flexibility offers significant advantages in terms of routing and accommodating design changes.